

REMARKS

Applicants respectfully request reconsideration of the present application. No new matter has been added to the present application. Claims 1-28 were rejected in the Office Action. Claims 1, 5-8, 12-15, 22 and 28 have been amended, new claim 29 has been added, and no claims have been canceled in this Amendment. Accordingly, claims 1-29 are pending herein. Claims 1-29 are believed to be in condition for allowance upon review and acceptance of these remarks. Favorable action is respectfully requested.

Amendments to the Claims

Claims 1, 5-8, 12-15, 22 and 28 have been amended herein. Care has been exercised to avoid the introduction of new matter. Support for the amendments to claims 1 and 8 may be found in the Specification, for example, at paragraphs [0022], [0023], and [0038]. Support for the amendments to claims 5 and 12 may be found in the Specification, for example, at paragraphs [0042] and [0043]. Support for the amendments to claims 6 and 13 may be found in the Specification, for example, at paragraphs [0022] – [0024] and [0042]. Support for the amendments to claims 7 and 14 may be found in the Specification, for example, at paragraph [0045]. Support for the amendments to claims 15, 22, and 28 may be found in the Specification, for example, at paragraphs [0022] – [0024] and [0038].

Rejections based on 35 U.S.C. § 102(e)

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdeggal Brothers v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the . . .

claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 2 USPQ 2d 1913, 1920 (Fed. Cir. 1989). Further, the elements must be arranged as required by the claim. *See in re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). *See also*, MPEP § 2131.

Claims 1-6, 8-13 and 28 are rejected under 35 U.S.C. § 102(e) as being anticipated by Minyard et al., U.S. Patent No. 6,891,920 (“Minyard”). As Minyard fails to describe, either expressly or inherently, every limitation for each of claims 1-6, 8-13 and 28, as amended herein, Applicants respectfully traverse this rejection as hereinafter set forth.

Referring initially to independent claim 1, a computerized method is provided for managing large studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station. The computerized method includes: without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set; and automatically distributing the at least one selected subset of studies to at least one review station such that the at least one selected subset of studies is available on demand for review by a physician.

In contrast, Minyard discusses a mammographic imaging system and tools for processing mammographic images. *See, e.g., Minyard*, Abstract. Images may be processed by background processing that includes preprocessing and/or interim processing. *See id.*, Abstract, col. 3, lines 15-27. Processing may include, for example, ordering the sequence of images for a review session, annotating images, and optimizing image information for a particular display. *See, id.*, col. 3, line 16 through col. 4, line 57. Additionally, the system allows physicians to manually tag images for later review. *See, id.*, col. 4, lines 29-57.

It is respectfully submitted that Minyard fails to describe, either expressly or inherently, every limitation of independent claim 1, as amended herein. First, Minyard fails to describe “without having previously distributed the studies to a review station, sorting each received study into at least one appropriate working set and selecting at least one subset of the received studies from at least one working set.” The Office Action indicates that the feature of selecting a subset of images is discussed in Minyard as physician tagging. *See, e.g., Office Action dated 4/30/2007*, p.3, 10 and 11. In particular, Minyard discusses allowing a physician to initially review a large number of images at a review station and tag an image for later review. Accordingly, to allow a physician to tag images in Minyard, images first have to be transmitted to a review station to allow the physician to review and tag images for later review. As such, a subset of studies is not selected without having previously distributed the studies to a review station as required by amended claim 1. Instead, in Minyard, the images are necessarily distributed to a review station prior to the images being tagged by a physician in contrast to the recited language of claim 1.

Additionally, Minyard fails to describe “automatically distributing the at least one selected subset of studies to at least one review station such that the at least one selected subset of studies is available on demand for review by a physician” as recited in amended claim 1. In the invention of claim 1, a subset of studies is selected (without having been previously distributed to a review station) and then automatically distributed to at least one review station such that the subset of studies is available on demand by a physician without requiring the physician to wait while the studies are transferred to the review station. As discussed in the Specification, this allows review stations to be primed with a subset of studies available for review upon demand without creating excessive network traffic and consuming excessive

memory resources that would be required to transfer all studies to review stations. It is respectfully submitted that Minyard is not concerned with distributing studies from a server to reviewing stations in a manner that provides for immediate access to a subset of the studies without creating excessive network traffic and consuming excessive memory resources. Instead, in Minyard, images are first transferred to a review station for initial review by a physician who may tag the images for later review. The physician may then request the tagged images at a later time. This mode of operation is completely different from selecting a subset of studies without having previously distributed the studies to a review station and then automatically transferring the subset to a review station such that the studies are available upon demand for review by a physician.

It is respectfully submitted that Minyard fails to describe, either expressly or inherently, each and every element of amended independent claim 1, and, as such, claim 1 is not anticipated by the Minyard. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(e). Claim 1 is believed to be in condition for allowance and such favorable action is respectfully requested.

Independent claim 8 recites a system for managing large studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station. The system includes the following modules: a study sorting module for sorting each study received by the study process server into at least one appropriate working set; a study control module for automatically selecting at least one subset of studies from at least one working set without user input; and a study distribution module for automatically distributing the selected at least one subset of studies to at least one selected review station such that the at least one selected subset of studies is available on demand for review by a physician.

Applicants respectfully submit that Minyard fails to describe, either expressly or inherently, each and every limitation of independent claim 8, as amended herein. First, Minyard fails to describe “a study control module for automatically selecting at least one subset of studies from at least one working set without user input.” Instead, Minyard discusses allowing a physician to tag images for later review. A physician tagging images for later review as in Minyard does not comprise a study control module that automatically selects a subset of studies from a working set without user input as recited in claim 8.

Minyard additionally fails to describe “a study distribution module for automatically distributing the selected at least one subset of studies to at least one selected review station such that the at least one selected subset of studies is available on demand for review by a physician.” Minyard simply fails to discuss a system in which a review station is primed with a subset of studies such that the subset of studies are available to a physician on demand.

It is respectfully submitted that Minyard fails to describe, either expressly or inherently, each and every element of amended independent claim 8, and, as such, claim 8 is not anticipated by the Minyard. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 8 under 35 U.S.C. § 102(e). Claim 8 is believed to be in condition for allowance and such favorable action is respectfully requested.

Independent claim 28, as amended herein, is directed to one or more computer-readable media embodying computer-useable instructions for performing a computerized method for managing the transfer of studies to a plurality of review stations, wherein the studies are grouped into a plurality of working sets. The method includes automatically selecting at least one subset of studies from at least one working set; automatically distributing at least one subset

of studies to each of the plurality of review stations such that at least one subset of studies is available on demand for review by a user at each of the plurality of review stations; monitoring the plurality of review stations for one or more selected user activities; and upon detecting at least one of the one or more selected user activities at a review station selected by a user, transferring additional studies to the selected review station.

Minyard fails to describe, either expressly or inherently, multiple limitations of claim 28. For instance, Minyard fails to discuss the feature of automatically distributing a subset of studies to a plurality of review stations such that studies are available on demand for review by a physician at each of the review stations. Minyard merely discusses allowing a user to tag images for later review at a given workstation and does not discuss automatically distributing subsets of studies to multiple review stations.

Additionally, Minyard fails to describe the features of monitoring a plurality of review stations for selected user activities, and upon detecting a selected user activity at a review station selected by a user, transferring additional studies to the selected review station. Minyard is completely silent with respect to these features.

It is respectfully submitted that Minyard fails to describe, either expressly or inherently, each and every element of amended independent claim 28, and, as such, claim 28 is not anticipated by the Minyard. Accordingly, Applicants respectfully request withdrawal of the rejection of claim 28 under 35 U.S.C. § 102(e). Claim 28 is believed to be in condition for allowance and such favorable action is respectfully requested.

Claims 2-6 depends from independent claim 1, claims 9-13 depend from claim 8, and claim 29 depends from independent claim 28. Accordingly, these claims are believed to be in condition for allowance for at least the above-cited reasons. As such, Applicants respectfully

request withdrawal of the 35 U.S.C. § 102(e) rejections of these claims as well. Furthermore, many of these dependent claims recite further patentable features that are not described, either expressly or inherently, by Minyard. For instance, claims 6 and 13 recite limitations directed to monitoring review stations for selected user activities after a selected subset has been distributed to a review station and populating a review station with additional studies upon detecting a selected user activity. Minyard fails to describe these further features in the context of the features recited in the base independent claims 1 and 8.

Rejections based on 35 U.S.C. § 103(a)

A. Applicable Authority

Title 35 U.S.C. § 103(a) declares, a patent shall not issue when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” The Supreme Court in *Graham v. John Deere* counseled that an obviousness determination is made by identifying: the scope and content of the prior art; the level of ordinary skill in the prior art; the differences between the claimed invention and prior art references; and secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1 (1966).

To support a finding of obviousness, the initial burden is on the Office to apply the framework outlined in *Graham* and to provide some reason, or suggestions or motivations found either in the prior art references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the prior art reference or to combine prior art reference teachings to produce the claimed invention. See, *Application of Bergel*, 292 F. 2d 955, 956-957 (1961). Thus, in order “[t]o establish a *prima facie* case of obviousness, three basic criteria must

be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success [in combining the references]. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” See MPEP § 2143. Recently, the Supreme Court elaborated, at pages 13-14 of *KSR*, it will be necessary for [the Office] to look at interrelated teachings of multiple [prior art references]; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by [one of] ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the [patent application].” *KSR v. Teleflex*, 127 S. Ct. 1727 (2007).

B. Obviousness Rejection Based on the Minyard and Fuller References

Claims 7 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard as applied to claims 1-6, 8-13 and 28 in view of Fuller, U.S. Patent Publication No. 2005/0050552 (“Fuller”). Applicants respectfully traverse this rejection, as hereinafter set forth.

Initially, Applicants respectfully submit that Minyard and Fuller fail to teach or suggest each limitation of claims 7 and 14. Claim 7 depends from independent claim 1, and claim 14 depends from independent claim 8. The Office Action appears to rely on Minyard for teaching or suggesting the limitations of the base claims 1 and 8. However, Minyard fails to teach or suggest all limitations from the base claims as described hereinabove. The addition of Fuller fails to correct these deficiencies. As such, claims 7 and 14 are patentable at least based on their dependencies from claims 1 and 8.

Additionally, Fuller fails to teach or suggest the limitations for which it was cited, namely the additional features recited in claims 7 and 14. In particular, Fuller is directed to delivering data from a device driver to an application within a computer in a way that optimizes processing, which is wholly inapplicable to managing large studies between a central server and review stations (e.g., in a hospital). This disclosure in Fuller fails to teach or suggest the limitations of claims 7 and 14. Fuller does not discuss monitoring a review station for a low buffer threshold and re-populating any review station reaching the low buffer threshold with at least one additional subset of studies. Instead, Fuller is concerned with delivering data from an application to a device driver, which clearly does not meet the limitations recited in claims 7 and 14. As such, the rejection of claims 7 and 14 at least fails to meet the *Graham* factors of determining the scope and contents of the prior art, and ascertaining the differences between the prior art and the claims at issue. Clearly, there are significant differences between the prior art and the claims at issue as delivering data to a device driver as described in Fuller is significantly different from monitoring review stations and re-populating a review station with a subset of studies when a low buffer threshold is determined.

Further, there is no suggestion or motivation to combine Fuller's teaching with the teaching of Minyard. The Office Action has not presented any apparent reason why someone of ordinary skill in the art would have combined Minyard and Fuller. The sole rationale provided in the Office Action to combine Minyard and Fuller is that "[i]t would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Fuller's system would have provided Minyard's invention with [sic] enhancing the likelihood that the requested data are available for immediate delivery." *Office Action dated 4/30/2007*, p. 4-5. The Office Action cannot rely on

the benefit of the combination without first supporting the motivation to make the combination. Such motivation does not appear anywhere in either of the references, and the Office Action has not presented any actual evidence in support of the same. Instead, the Office Action relies on broad conclusory statements. Such a basis does not adequately support the combination of references. Neither Minyard nor Fuller discloses or suggests a motivation to combine with the other to achieve the claimed invention. The references themselves do not suggest the viability of making the combination, and someone of ordinary skill in the art would not think to combine them. There is no apparent reason why one of ordinary skill in the art would have combined the Minyard and Fuller references or otherwise modified the references to achieve the inventions of claims 7 and 14. Instead, the rejection appears to be based on hindsight. Thus, the references are not properly combined.

Additionally, Applicants submit that the combination of the Minyard and Fuller references in the Office Action is based on a mischaracterization of the Fuller reference. In particular, Applicants traverse the statement that “the Minyard and Fuller reference are analogous and in the same field of endeavor as both are at least related to processing and delivering data in a network environment.” *Office Action dated 4/30/2007*, p. 11. The Fuller reference simply is not concerned with processing and delivering data in a network environment. To the extent the Examiner disagrees, the Examiner is requested to provide a citation to a portion of the Fuller reference discussing transferring studies over a network to a review station. Applicants also traverse the Office Action’s conclusion that the Fuller reference is analogous art. As indicated above, Fuller is directed to delivering data from a device driver to an application within a computer in a way that optimizes processing. Clearly, Fuller is not in the field of Applicants’ endeavor. Moreover, Applicants were concerned with distributing studies from a

central server to review stations in a manner that prevents creating excessive network traffic and consuming excessive memory resources, not with optimizing the performance of an application operating on a computer. Since Fuller is neither in the field of Applicants' endeavor nor reasonably pertinent to the particular problem with which Applicants were concerned, it cannot be relied on as a basis for rejecting claims 7 and 14.

Nonetheless, as indicated above, even if the references were combined, the combination of Minyard and Fuller fails to teach or suggest all limitations of claims 7 and 14. Nothing in either Minyard or Fuller teaches or suggests monitoring a review station for a low buffer threshold and re-populating a review station with additional studies upon detecting a low buffer threshold. Further, the Office Action fails to provide any rationale for modifying the Minyard and Fuller references to achieve the inventions of claims 7 and 14.

For at least the above-cited reasons, Applicants submit that claims 7 and 14 are non-obvious over Minyard and Fuller. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 7 and 14 under 35 U.S.C. § 103(a). Claims 7 and 14 are believed to be in condition for allowance and such favorable action is respectfully requested.

C. Obviousness Rejection Based on the Minyard and Rothschild References

Claims 15-20 and 22-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard in view of Rothschild et al., U.S. Patent Publication No. 2002/0016718 ("Rothschild"). Applicants respectfully traverse this rejection, as hereinafter set forth.

Referring initially to independent claim 15, a computerized method is recited for managing studies transferred from at least one acquisition device to a study process server in order to transfer the studies to at least one review station. The method includes automatically

transferring a selected subset of the existing studies from the study process server to at least one review station such that the selected subset of the existing studies is available for review upon login; monitoring the at least one review station for a login; and populating the at least one review station with additional studies from at least one relevant working set upon detecting the login.

Applicants initially submit that Minyard and Rothschild, either alone or in combination, fail to teach or suggest all limitations of independent claim 15. In particular, the references fail to teach or suggest populating a review station (that has been pre-populated with a selected subset of studies) with additional studies from a working set upon detecting a login. As indicated above, Minyard discusses physician tagging that occurs after images have been transmitted for a physician to review and tag for later review. As such, Minyard simply fails to teach or suggest transferring a subset of studies to a review station and then monitoring and populating the review station with additional studies upon detecting a login. Additionally, Rothschild discusses a system that either pushes images to a remote location as the images are received or waits for a triggering event to push the images to the remote location and not a combination of both.

In contrast to Minyard and Rothschild, the invention of claim 15 is directed to first distributing a subset of studies to a review station (such that some studies are readily available at the review station upon a login) and then distributing additional studies upon detecting a login. Accordingly, when a physician logs into a review station, some studies are readily available for the physician's review while additional studies are transferred to the review station in the background. Nothing in Minyard and/or Rothschild teaches or suggests this approach. At best, a combination of Rothschild with Minyard would merely provide a system

that pushes images to a review station upon detecting a login. However, the invention of claim 15 advances the state of the art as it is directed to first priming a review station with a subset of studies such that the subset is immediately available upon login and then transferring additional studies to the review station upon detecting a login.

For at least the above-cited reasons, Applicants submit that claim 15 is non-obvious over Minyard and Rothschild. Independent claim 22 contains limitations similar to claim 15 and is non-obvious for at least the above-cited reasons set forth for claim 15. Further, because claims 16-20 depend from claim 15 and claims 23-27 depend from claim 22, these claims are similarly non-obvious over the cited references. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 15-20 and 22-27 under 35 U.S.C. § 103(a). Claims 15-27 are believed to be in condition for allowance and such favorable action is respectfully requested.

D. Obviousness Rejection Based on the Minyard, Fuller, and Rothschild References

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard as applied to claims 1-6, 8-13 and 28 in view of Minyard and Rothschild as applied to claims 15-20 and 22-27 above and further in view of Fuller. Applicants respectfully traverse this rejection, as hereinafter set forth. In particular, Applicants respectfully submit that Minyard, Rothschild, and Fuller fail to teach or suggest each and every limitation of claim 21. Claim 21 depends from independent claim 15. The Office Action appears to rely on Minyard and Rothschild for teaching or suggesting the limitations of the base claim 15. *See Office Action dated 4/30/2007*, p. 5. However, Minyard and Rothschild fail to teach or suggest all limitations from the base claim as described hereinabove. The addition of Fuller fails to correct these deficiencies. As such, claim 21 is patentable at least based on its dependency from claims 15.

CONCLUSION

For at least the reasons stated above, claims 1-29 are now in condition for allowance. Applicants respectfully request withdrawal of the pending rejections and allowance of the claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned – 816-474-6550 or jgolian@shb.com (such communication via email is herein expressly granted) – to resolve the same. The Commissioner is hereby authorized to charge any amount required, or refund any applicable amount, to Deposit Account No. 19-2112.

Respectfully submitted,

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